

Senate File 2286 - Introduced

SENATE FILE 2286
BY COMMITTEE ON COMMERCE

(SUCCESSOR TO SF 2072)

A BILL FOR

1 An Act specifying procedures applicable to claims asserting
2 stray electric current or voltage.
3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. NEW SECTION. 476D.1 Short title.

2 This chapter shall be known and may be cited as the "*Stray*
3 *Current and Voltage Remediation Act*".

4 Sec. 2. NEW SECTION. 476D.2 Definitions.

5 As used in this chapter, unless the context otherwise
6 requires:

7 1. "*Board*" means the utilities board within the utilities
8 division of the department of commerce.

9 2. "*Cow contact points*" means any two electrically
10 conductive points which a dairy cow may, in its normal
11 environment, unavoidably and simultaneously contact.

12 3. "*Dairy producer*" means any person or entity that owns or
13 operates a dairy farm or that owns cows that do or are intended
14 to produce milk.

15 4. "*Preventive action level*" is stray current or voltage
16 constituting either of the following:

17 a. A steady-state, root mean square alternating current
18 of two milliamp or more through a five hundred ohm resistor
19 connected between cow contact points, as measured by a true
20 root mean square meter.

21 b. A steady-state, root mean square alternating current
22 voltage of one volt or more, across or in parallel with a five
23 hundred ohm resistor connected between cow contact points, as
24 measured by a true root mean square meter.

25 5. "*Steady-state*" means the value of a current or voltage
26 after an amount of time where all transients have decayed to a
27 negligible value.

28 6. "*Stray current or voltage*" means either of the following:

29 a. Any steady-state, sixty hertz, including harmonics
30 thereof, root mean square alternating current of less than
31 twenty milliamp through a five hundred ohm resistor connected
32 between cow contact points, as measured by a true root mean
33 square meter.

34 b. Any steady-state, sixty hertz, including harmonics
35 thereof, root mean square alternating current voltage of less

1 than ten volts, across or in parallel with a five hundred ohm
2 resistor connected between cow contact points, as measured by
3 a true root mean square meter.

4 7. "Utility" means a public utility as defined in Code
5 section 476.1, or for purposes of this chapter, any other
6 person owning or operating more than one thousand five hundred
7 miles of transmission lines and associated facilities in this
8 state.

9 Sec. 3. NEW SECTION. 476D.3 Rules — scope of authority.

10 1. The board shall by rule establish standard procedures
11 and protocols which may be used for the measurement of stray
12 current or voltage. The board shall review the rules from time
13 to time, or upon petition to the board, to ensure that the
14 standard procedures and protocols continue to be scientifically
15 and technologically accurate and a reliable means of detecting
16 stray current or voltage. Other measurements of stray current
17 or voltage made using other procedures and protocols may be
18 considered by the board in appropriate cases.

19 2. The purpose for the standard procedures and protocols
20 established by rule pursuant to subsection 1 shall be
21 for utilization by a utility in taking measurements of
22 stray current or voltage, and by the board in preparing a
23 determination of source document that may be utilized by either
24 a dairy producer or a utility as evidence of the source and
25 level, if any, of stray current or voltage. The determination
26 of source document shall be based on qualified, measurable,
27 scientific facts. Neither the board, nor the determination of
28 source document, shall establish liability or civil damages in
29 connection with a civil lawsuit.

30 Sec. 4. NEW SECTION. 476D.4 Stray current or voltage
31 program — claims — notice — utility response.

32 1. A dairy producer in this state that claims that its
33 dairy cows are being affected by stray current or voltage may
34 participate in the stray voltage program. The dairy producer
35 shall provide written notice to the utility and may provide

1 notice to the board to participate in the program. The notice
2 shall include a nonbinding statement as to why the dairy
3 producer claims its dairy cows are being affected by electrical
4 energy attributable to the utility.

5 2. *a.* Within fourteen business days after receipt of a
6 notice alleging stray current or voltage by a utility pursuant
7 to subsection 1, the utility shall take or arrange for the
8 taking of measurements to identify the existence and magnitude
9 of the stray current or voltage, if any. A dairy producer
10 providing notice of the claim shall permit entry onto the
11 dairy farm at dates and times mutually agreed upon by the
12 dairy producer and the utility. The utility shall perform no
13 other service or inspection on the dairy farm beyond taking
14 measurements of stray current or voltage, except the utility
15 may advise the dairy producer as to recommended on-farm
16 remedial action and may perform such remedial action with
17 the permission of the dairy producer. The utility or its
18 representative shall abide by the dairy farm's biosecurity
19 protocols or, if none, generally accepted biosecurity protocols
20 in the industry, prior to entry onto the dairy farm. The
21 utility shall be provided advance notice of any biosecurity
22 protocols adopted by the dairy producer.

23 *b.* A dairy producer may include with the notice provided
24 pursuant to subsection 1, or in a subsequent notice, a written
25 request for the board to take or arrange for the taking of
26 separate and independent measurements to identify the existence
27 and magnitude of stray current or voltage, if any. Such a
28 request may also be made by the utility. Measurements by the
29 board shall be taken by a representative of the board directly,
30 or by a neutral third-party expert selected by the board for
31 such purposes. The board or a selected third-party expert
32 shall perform no other service or inspection on the dairy farm
33 beyond taking measurements of stray current or voltage, except
34 the board or third-party expert may advise the dairy producer
35 as to recommended on-farm remedial action. The board or the

1 third-party expert shall abide by the dairy farm's biosecurity
2 protocols or, if none, by generally accepted biosecurity
3 protocols in the industry, prior to entry onto the dairy farm.
4 The board shall subsequently prepare or cause to be prepared
5 the determination of source document as described in section
6 476D.3 which shall be made available to both the dairy producer
7 and the utility.

8 3. If the utility or the board's measurements identify
9 a level of stray current or voltage at cow contact points
10 in excess of the preventive action level, the utility or the
11 board, as applicable, shall promptly identify if the utility's
12 distribution system's contribution is greater than one milliamp
13 or one volt, measured in the same manner as the preventive
14 action level. For purposes of this determination, stray
15 current or voltage on the utility's distribution system shall
16 be attributed to the utility even if caused by other customers
17 connected to the utility's distribution system. If that
18 portion of the stray current or voltage at cow contact points
19 attributable to the utility's distribution system exceeds
20 one milliamp or one volt, the utility shall, within fifteen
21 business days, commence and diligently pursue to completion,
22 remedial procedures which result in, and are reasonably likely
23 to sustain, a reduction of the stray current or voltage at
24 cow contact points attributable to the utility's distribution
25 system to one milliamp or less or one volt or less, measured in
26 accordance with the rules established by the board.

27 Sec. 5. NEW SECTION. 476D.5 Civil actions.

28 A civil action shall not be commenced by a dairy producer
29 against a utility seeking damages or other relief allegedly due
30 to injury caused by stray current or voltage unless the dairy
31 producer has provided notice of its participation in the stray
32 current or voltage program in accordance with section 476D.4
33 at least ninety days prior to filing such an action. In any
34 civil action against a utility for damages or other relief, the
35 written documentation prepared by or on behalf of the board

1 pursuant to section 476D.4 may be admissible in evidence. Any
2 and all civil damages shall be determined by a court of law,
3 and shall be based on evidence provided by both parties.

4

EXPLANATION

5 This bill specifies procedures applicable to claims
6 asserting stray electric current or voltage impacting dairy
7 cows.

8 The bill provides for the adoption of administrative rules
9 by the Iowa utilities board establishing standard procedures
10 and protocols for the measurement of stray current or voltage.
11 The bill directs the board to review the rules periodically
12 to ensure that they remain accurate and reliable with regard
13 to stray current or voltage measurement, and provides that
14 other forms of measurement may be considered by the board in
15 appropriate cases. The bill states that the purpose for the
16 standard procedures and protocols shall be for utilization by a
17 utility in taking measurements of stray current or voltage, and
18 by the board in preparing a determination of source document
19 that may be utilized by either a dairy producer or a utility as
20 evidence of the source and level, if any, of stray current or
21 voltage. The bill provides that the determination of source
22 document shall be based on qualified, measurable, scientific
23 facts, and that neither the board nor the document shall
24 establish liability or civil damages in connection with such a
25 civil lawsuit.

26 The bill provides that a dairy producer in Iowa who claims
27 that its dairy cows are being affected by stray current or
28 voltage may participate in a stray voltage program by providing
29 written notice to the utility and, optionally, to the board
30 containing a nonbinding statement as to why the dairy producer
31 believes its dairy cows are being affected by electrical energy
32 attributable to the utility.

33 Within 14 business days after receipt of the notice, the
34 bill requires the utility to take or arrange for the taking
35 of measurements to identify the existence and magnitude of

1 the stray current or voltage, if any. The bill provides that
2 a dairy producer shall permit entry onto the dairy farm at
3 dates and times mutually agreed upon by the dairy producer and
4 the utility for the purpose of taking the measurements, and
5 prohibits the utility from performing any other service or
6 inspection on the dairy farm beyond taking the measurements
7 other than advising the dairy producer as to recommended
8 on-farm remedial action and performing such remedial action
9 with permission. The bill provides that the utility or its
10 representative shall abide by the dairy farm's biosecurity
11 protocols, or if none, generally accepted biosecurity protocols
12 in the industry prior to entry onto the dairy farm, and
13 requires the dairy producer to provide advance notice of any
14 biosecurity protocols they have adopted to the utility.

15 The bill provides that a dairy producer, or a utility,
16 may request that the board take or arrange for the taking
17 of separate and independent measurements to identify the
18 existence and magnitude of stray current or voltage, if
19 any, either directly or by a neutral third-party expert
20 selected by the board for such purposes. The bill applies
21 the same restrictions regarding performing no other service
22 or inspection and abiding by biosecurity protocols as are
23 applicable to measurements taken by the utility. After
24 measurements are taken by or on behalf of the board, the
25 board is required to prepare or cause to be prepared the
26 determination of source document and to make the document
27 available to both the dairy producer and the utility.

28 The bill states that if the utility or the board's
29 measurements identify a level of stray current or voltage at
30 cow contact points in excess of the preventive action level,
31 as all are defined in the bill, the utility or the board,
32 as applicable, shall promptly identify if the utility's
33 distribution system's contribution is greater than one milliamp
34 or one volt, measured in the same manner as the preventive
35 action level. For purposes of this determination, the bill

1 provides that stray current or voltage on the utility's
2 distribution system shall be attributed to the utility,
3 even if caused by other customers connected to the utility's
4 distribution system. If that portion of the stray current or
5 voltage at cow contact points attributable to the utility's
6 distribution system exceeds one milliamp or one volt, the
7 bill directs the utility to within 15 business days commence
8 and diligently pursue to completion remedial procedures which
9 result in, and are reasonably likely to sustain, a reduction
10 of the stray current or voltage to one milliamp or less or one
11 volt or less, measured in accordance with the rules established
12 by the board.

13 The bill provides that a civil action shall not be commenced
14 by a dairy producer against a utility seeking damages or other
15 relief allegedly due to injury caused by stray current or
16 voltage unless the dairy producer has provided notice of its
17 participation in the stray current or voltage program at least
18 90 days prior to filing the action. The bill states that in
19 such an action the written documentation prepared by or on
20 behalf of the board may be admissible in evidence, but that any
21 and all civil damages shall be determined by a court of law
22 based on evidence provided by both parties.